

RedLINE® MOPPING INSTALLATION

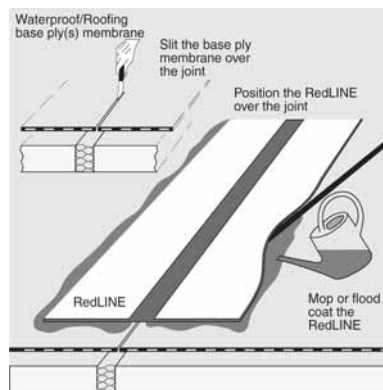
**FOR USE WITH:
HOT ASPHALT, COAL TAR PITCH,
OR MODIFIED BITUMEN**

INTRODUCTION

This installation technique is used predominantly in roofing and waterproofing systems that are asphalt/bitumen or coal tar pitch-based. The process of installing the RedLINE waterproofing joint system is simple. The complete expansion joint material is shipped in a roll with all detailing prefabricated. Installation takes place as roofing/waterproofing progresses. The installation procedure is described as follows:

STEP 1: SUBSTRATE PREPARATION

Clean and dry the substrate ensuring it is free of debris and dirt. Install the base plies (in a BUR/Coal Tar Pitch*/Modified Bitumen). Slit the installed membrane along the building expansion joint, when the base plies span the joint gap, making sure that the cut is clean and continuous. Pack the expansion joint gap with compressible batt insulation.



STEP 2: ALIGNMENT

Unroll the RedLINE material and position it over the expansion joint. Verify the correct fit of the roll. The starting location is indicated on the drawings supplied with the RedLINE.

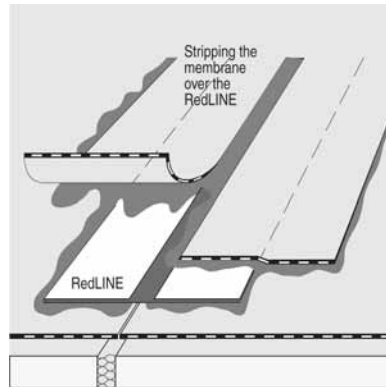
STEP 3: ADHESION

The polyester fleece on the RedLINE material must be kept dry at all times. A wet fleece surface will result in blisters, once hot liquid is applied to it. Apply a flood coat of asphalt/bitumen or coal tar pitch. Lay the RedLINE material, in the flood coat of asphalt, and press it in with a smoothing action. The asphalt/bitumen or coal tar pitch must be at its Equiviscous Temperature (EVT) when being applied to the fleece. Always lay the RedLINE expansion joint material only in lengths which allow for immediate contact with the hot material. Do not lay the RedLINE in cold material.

* Coal Tar Pitch membranes require ply envelopes to prevent coal tar drippage into the building interior see the appropriate RedLINE detail.

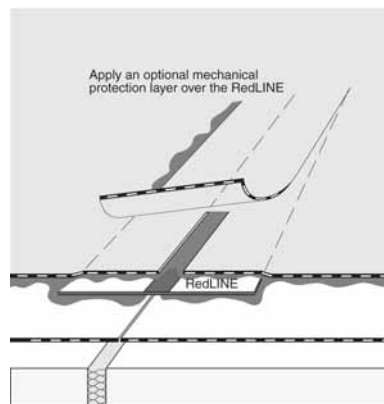
STEP 4: STRIPPING IN

Coat the top side polyester fleece with asphalt/bitumen or coal tar pitch. Install the top ply in the flood coat of asphalt/bitumen or coal tar pitch; the use of a mop is acceptable. Note that the asphalt/bitumen and coal tar pitch is at the correct EVT at the point of application. Fully coat the RedLINE fleece with asphalt/bitumen; an indication of this is a bleed visible along the ply's edge and no white fleece showing. Ensure proper fleece encapsulation, by "smoothing down" the RedLINE in asphalt/bitumen.



STEP 5: PROTECTION LAYER (OPTIONAL)

If an additional protection layer is required, mop or torch a compatible strip of modified bitumen membrane to one side of the joint, covering the exposed part of the RedLINE material. This allows for the free movement of the protection layer.



TAKE NOTE...

POINTS TO NOTE WHEN MOPPING RedLINE IN ASPHALT, COAL TAR PITCH OR MODIFIED BITUMEN

1. Ensure that the RedLINE material fleece is dry. If by chance it is exposed to moisture, dry it out prior to application either by hot air drying or laying it out in the sun.
2. The asphalt/bitumen, coal tar pitch used must be at its EVT when applied to the RedLINE fleece.
3. Ensure that the RedLINE fleece is fully encapsulated within the asphalt/bitumen or coal tar pitch.
4. Always lay the RedLINE expansion joint material only in lengths which allow for immediate contact with the hot material. Do not lay the RedLINE in cold material.

A MOPPING RedLINE® APPLICATION ON A PROTECTED MEMBRANE BUR ROOFING PROJECT



◀ Prior to the commencement of roofing the roof expansion cover is reviewed and examined. The photo on the left shows the covered expansion joint running across the roof. Note the skylights butting the expansion joint. The expansion cover was leaking and obstructed the flow of water across the roof to the drains on the right, resulting in water ponding between the skylights and compounding the leakage.



▲ Close up of the condition of the expansion cover at the corner of each of the sky lights on the roof.



▲ Close up of the expansion cover termination at the edge of the building. Note the direction change on the roof parapet.



◀ The existing expansion joint, exposed. The joint was raised, hence obstructing the drainage of water. Over the years cutouts were made in the expansion joint in an attempt to alleviate the drainage problem.



▶ Building expansion joint exposed, running along the skylight.

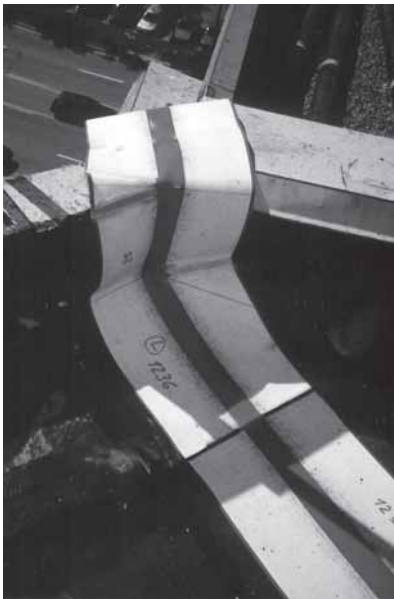
▶ The RedLINE waterproof expansion joint shipped to the site in a roll with site drawing, indicating starting point of installation and any other special features.





◀ The RedLINE expansion joint being unrolled on site to verify fit.

The RedLINE expansion joint custom corner detail at the roof skylight. ▶



◀ The RedLINE expansion joint custom edge corner detail. The expansion joint changes both planes (from horizontal to vertical) and direction (twice).



◀ Joint waterproofing is laid out along the roof expansion joint. Note the roofing base ply(s) have already been installed and cut along the building joint gap.

Asphalt in a bucket being readied. The asphalt was hot and at its recommended EVT. ▶

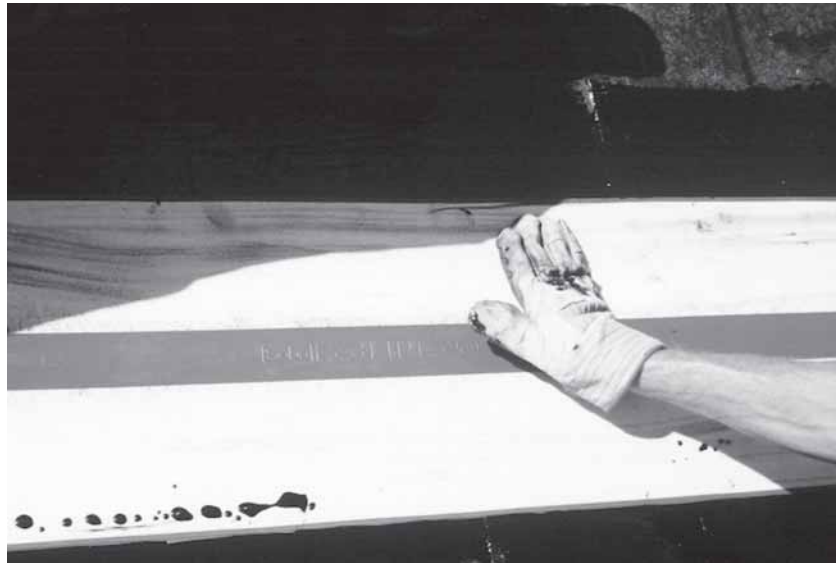


◀ Mopping the RedLINE expansion joint down. Note that both the base plies and the underside of the RedLINE are coated with asphalt.



◀ A strong bond forms between the RedLINE fleece and the roof surface, totally encapsulating the fleece.

▶ The RedLINE expansion joint is smoothed down.



▶ The versatility of the RedLINE expansion joint allows the installer to easily work around details, such as this roof anchor.





◀ The mopped down RedLINE at the skylight corner. The RedLINE material conforms to the shape of the skylight corner.

▶ Stripping in of the top surface of the RedLINE. Asphalt was applied by mop.



◀ RedLINE mopping in asphalt continues.





◀ The RedLINE expansion joint installed along the roof skylight. Note the cold applied modified bitumen flashing.

► The completed roof installation. Use of the RedLINE expansion joint achieved the two primary objectives initially set. A high performance expansion joint which addressed the difficult skylight curb condition and eliminated the ponding water problem. The roof now has positive drainage.

